# STATE OF WASHINGTON DEPARTMENT OF ECOLOGY



# TRUST WATER RIGHT – REPORT OF EXAMINATION

# A Change to the Purpose- and Place-of-Use WRTS File #: CS4-1858&1859CTCL(B) CRBWMP Contract Grant No. G0900195

PRIORITY	CLAIM NO.	PERMIT NO.		CERTIFICATE NO.						
October 23, 1889	1858 and 1859									
NAME OF PARTY CONVEYING RIGHT TO TRUST WATER RIGHTS PROGRAM										
The Barker Ranch, Ltd.										
ADDRESS/STREET		CITY/STATE	CITY/STATE							
85305 Snively Road		West Richland, WA		99353-6151						
TRUST WATER RIGHT ATTRIBUTES										
SOURCE										
Yakima River										
TRIBUTARY OF (IF SURFACE WATERS)										
Columbia River										
MAXIMUM CUBIC FEET PER SECOND (CFS)  MAXIMUM GALLONS PER MINUTE (GPM)  MAXIMUM ACRE FEET PER YEAR (AFY)										

QUANTITY, TYPE OF USE, PERIOD-OF-USE

6,435.5 acre-feet, for instream flow, annually from January 1 through December 31.

#### Table 1

#### Trust Water Right Calculations

6.435.5

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Qi	10.50	9.75	4.74	3.50	8.47	8.75	8.47	10.50	10.50	10.50	10.50	10.50	
Qa	645.60	541.50	291.60	208.30	520.70	520.70	520.70	645.60	624.80	645.60	624.80	645.60	6435.50

# **HISTORIC POINT-OF-DIVERSION**

APPROXIMATE LOCATION OF HISTORIC DIVERSION

On the left bank of the Yakima River at about River Mile 18.0, adjacent to the Wanawish Dam (formerly called Horn Rapids Dam). The point of diversion (POD) is located 2,067 feet north and 2,305 feet west from the SE corner of Section 3, T. 10 N., R. 27 E.W.M.

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)		SECTION	TOWNSHIP	RANGE.	WRIA	COUNTY
NW%SE%		03	10 N.	27 E.W.M.	37	Benton
PARCEL NUMBER		LATITUDE		LONGITUDE		DATUM
103074000001000		46.3786		-119.4174	NAD 83 HARN	

# AFFECTED REACHES - DESCRIPTION OF INSTREAM PLACE OF USE (POU)

[See Attachment 1 for map of the trust water right reach]

The primary reach is the only affected reach. This trust water right is a primary-reach only trust water right, with no secondary reach. The instream place-of-use is the Yakima River beginning at the historic POD, on the left bank at River Mile 18.0, being adjacent to Wanawish Dam, and continuing downstream about 7.1 River Miles to River Mile 10.9, terminating at a location estimated to be where the last of the historic Barker Ranch return flows rejoined the river, located in Section 29, T. 10 N., R. 28 E.W.M.

TRUST WATER RIGHT TERM							
BEGIN DATE		END DATE					
		This will be a permanent state trust water right.					

# Attachment 1: Trust water right reach



# PORTION OF WATER RIGHT NOT PLACED INTO TRUST

WRTS File #: CS4-1858&1859CTCL(A)

PRIORITY DATE	CLAIM NO.	PERMIT NO.		CERTIFICATE NO							
October 23, 1889	1858 and 1859			TBD							
NAME											
The Barker Ranch, Ltd.											
ADDRESS/STREET CITY/STATE ZIP CODE											
85305 Snively Road		West Richland, W	A	99353-6151							
	WATE	R RIGHT ATTRIBUTES									
SOURCE											
Yakima River											
TRIBUTARY OF (IF SURFACE WATERS)											
Columbia River											
MAXIMUM CUBIC FEET PER SECOND (CFS)	MAXIMUM GALLOI	NS PER MINUTE (GPM)	MAXIMUM ACRI	E FEET PER YEAR (AFY)							
59.25	N/A										
QUANTITY, TYPE OF USE, PERIOD-OF-USE											
21,866 acre-feet for irrigati	on of 1,893 acres to suppo	ort the continued crea	tion and mainten	ance of wetlands and							
wildlife habitat, annually from	· ·		•								
	LOCA	TION OF DIVERSION									
APPROXIMATE LOCATION OF DIVERSION											
2,067 feet north and 2,305 feet west from the SE corner of Section 3, T. 10 N., R. 27 E.W.M. (Same as historic POD.)											
LOCATED WITHIN (SMALLEST LEGAL SUBDI	VISION) SECTION	TOWNSHIP	RANGE	WRIA COUNTY							

# **LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED**

10 N.

27 E.W.M

-119.4174

LONGITUDE

37

NAD 83 HARN

Benton

03

46.3786

[See Attachment 2 on page 3 for a map of the place of use and point(s) of diversion or withdrawal]

Section 13, T. 10 N., R. 27 E.W.M. lying southwest of the Horn Rapids Canal; Sections 23, 24, 25, T. 10 N., R. 27 E.W.M. lying north and east of the Yakima River; Section 19, T. 10 N., R. 28 E.W.M. lying southwest of the Horn Rapids Canal EXCEPT that portion lying east of Grosscup Road; W1/2 NW1/4, Section 29, T. 10 N., R. 28 E.W.M. lying west of the Horn Rapids Canal, EXCEPT short plats 628, 693, 694, and 746; Section 30, T. 10 N., R. 28 E.W.M. lying north of the Yakima River, EXCEPT that portion lying east of Grosscup Road and north of Weidle Road; Section 31, T. 10 N., R. 28 E.W.M. lying north of the Yakima River.

# **DESCRIPTION OF WATER SYSTEM**

The Barker Ranch water system begins at their authorized point-of-diversion (POD) on the Yakima River, at about River Mile 18.0. The POD is on the left bank adjacent to the Wanawish Dam where water is diverted into the Horn Rapids Canal (Canal). The open Canal runs 0.24 miles to the historic Wanawish Fish Screens where the Ranch's water measuring and flow-control devices are located. The start of the 3.06-miles of buried pipe is the object of the publicly funded Canal piping water conservation project.

From the buried pipe, two main lateral turnouts direct water to various distribution ditches and secondary laterals. From these turnouts and laterals, various and numerous wetland and wildlife habitat zones are flood- and sprinkler-irrigated for their creation and maintenance.

DEVELOPMENT SCHEDULE							
BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL BENEFICIAL USE BY THIS DATE					
Begun	Completed	In Use					

NW1/4SE1/4

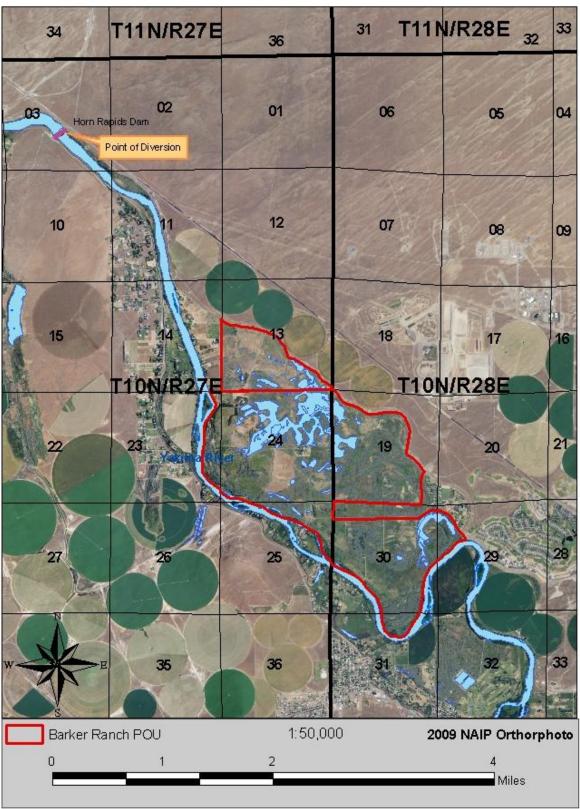
PARCEL NUMBER

103074000001000



# Barker Ranch

CS4-1858/1859CTCL(B)
Place-of-Use & Point-of-Diversion



Attachment 2: POU & POD

#### **PROVISIONS**

#### Provisions related to the portion of the water right not placed into trust

#### Measurements, Monitoring, Metering and Reporting

- An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule, "Requirements for Measuring and Reporting Water Use", WAC 173-173.
- Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Regional Office for forms to submit your water use data.
- WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

#### Department of Fish and Wildlife Requirement(s)

• The intake(s) must be screened in accordance with Department of Fish and Wildlife screening criteria (pursuant to RCW 77.57.010, RCW 77.57.070, and RCW 77.57.040). Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091. Attention: Habitat Program, Phone: (360) 902-2534 if you have questions about screening criteria. http://www.wdfw.wa.gov/about/regions/

#### **Easement and Right-of-Way**

• The water source and/or water transmission facilities are not wholly located upon land owned by the applicant. Issuance of a water right change authorization by this department does not convey a right of access to, or other right to use, land that the applicant does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.

#### **Water Use Efficiency**

• Use of water under this authorization will be contingent upon the water right holder's maintenance of efficient water delivery systems and use of current water conservation practices consistent with established regulation requirements and facility capabilities.

# **Schedule and Inspections**

 Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

#### **Real Estate Excise Tax**

This decision may indicate a Real Estate Excise Tax liability for the seller of water rights. The Department of Revenue has requested notification of potentially taxable water right related actions, and therefore will be given notice of this decision, including document copies. Please contact the state Department of Revenue to obtain specific requirements for your project. Phone: (360) 570-3265. The mailing address is: Department of Revenue, Real Estate Excise Tax, PO Box 47477, Olympia, WA 98504-7477
 Internet: <a href="http://dor.wa.gov/">http://dor.wa.gov/</a> Email: <a href="mailto:REETSP@DOR.WA.GOV">REETSP@DOR.WA.GOV</a>

#### **FINDINGS OF FACT AND ORDER**

Upon reviewing the investigator's report, I find all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I find the change of water right as recommended will not be detrimental to existing rights or detrimental to the public interest.

Therefore, I ORDER the requested change of place and purpose of use under Trust Water Right Application No. CS4-1858&1859CTCL(B), be approved subject to existing rights and the provisions specified above.

This Decision may be appealed pursuant to RCW 34.05.514(3), RCW 90.03.210(2), and Pretrial Order No. 12 entered in *State of Washington, Department of Ecology v. James Acquavella, et al.*, Yakima County Superior Court Cause No. 77-2-01484-5 (the general adjudication of surface water rights in the Yakima River Basin). The person to whom this Decision is issued, if he or she wishes to file an appeal, must file the notice of appeal with the Yakima County Superior Court within thirty (30) days of receipt of this Decision. Appeals must be filed with the Superior Court Clerk's Office, Yakima County Superior Court, 128 North 2<sup>nd</sup> Street, Yakima WA 98901, RE: Yakima River Adjudication. Appeals must be served in accordance with Pretrial Order No. 12, Section III ("Appeals Procedures"). The content of the notice of appeal must conform to RCW 34.05.546. Specifically, the notice of appeal must include:

The name and mailing address of the appellant;
Name and address of the appellant's attorney, if any;
The name and address of the Department of Ecology;
The specific application number of the decision being appealed;
A copy of the decision;

A brief explanation of Ecology's decision;

Identification of persons who were parties in any adjudicative proceedings that led to Ecology's decision;

Facts that demonstrate the appellant is entitled to obtain judicial review;

The appellant's reasons for believing that relief should be granted; and

A request for relief, specifying the type and extent of relief requested.

The "parties of record" who must be served with copies of the notice of appeal under RCW 34.05.542(3) are limited to the applicant of the decision subject to appeal, Ecology and the Office of the Attorney General.

All others receiving notice of this Decision, who wish to file an appeal, must file the appeal with the Yakima County Superior Court within **thirty** (30) days of the date the Order was mailed. The appeal must be filed in the same manner as described above.

Signed at Yakima, Washington, this \_\_\_\_\_\_ day of \_\_\_\_\_\_ 2011. Mark C. Schuppe, Operations Manager Office of Columbia River/CRO **Department of Ecology** 

#### **INVESTIGATOR'S REPORT**

#### **BACKGROUND**

#### **Description and Purpose of Proposed Change**

On May 20, 2010, The Barker Ranch, Ltd of West Richland, Washington (Barker Ranch) submitted to the Department of Ecology (Ecology) an *Application to Enter a Water Right into the Trust Water Rights Program*. The applicant seeks to transfer a portion of their water right, as confirmed under court claims 1858 & 1859 in adjudication proceedings by the Yakima County Superior Court (Court), to the state's Trust Water Rights Program (TWRP) in perpetuity. The *Report of Referee Re: Subbasin No. 30 (Hanford)*, entered by the Court in the Yakima River Basin Water Rights Adjudication proceeding, states that court claims 1858 and 1859 are duplicates; that they are not two differing water rights (p. 68).

The portion of the water right confirmed under the subject court claims proposed for transfer to the TWRP was borne from a water conservation project funded by Ecology's Office of Columbia River (OCR). Water conservation projects are one component of the Columbia River Water Management Program, as discussed in Section 2.1.2.2 of the *Final Programmatic Environmental Impact Statement for the Columbia River Water Management Program under Chapter 90.90 RCW* (FPEIS). Public funding of water conservation projects requires that the *net water savings* resulting from implementation of the conservation measures be placed in Ecology's TWRP in proportion to the state funding provided to the project.

The transfer of this portion of the applicant's court claims to the TWRP is an obligation by the applicant per the *Horn Rapids Canal Piping Project Construction Grant Contract* No. G0900195 (Contract), project-funding parameters, the FPEIS, and compliance with RCW 90.90.010(4). Because the state funded 100 percent of the total cost of the project, Barker Ranch is transferring to the TWRP 100 percent of the saved water that became available via their water conservation project.

The court confirmed the subject court claims in its March 12, 1992 *Conditional Final Order*, authorizing 39.5 cubic feet per second (CFS) maximum instantaneous diversion rate, and an annual quantity of 13,461 acre-feet per year (AFY) for irrigation of 1,923 acres; 17.3 CFS for conveyance loss and 14.3 CFS for operational spill during irrigation season; and, 0.05 CFS and 34 AFY for stock watering. The season-of-use for irrigation, conveyance loss, and operational spill was March 1 to October 31 and year-round for stock water use.

On April 16, 1999, Barker Ranch and the Benton County Parks & Recreation Department jointly submitted to the Benton County Water Conservancy Board (Board) an *Application for Change of Water Right* for the subject court claims, seeking to change the authorized season, purpose and place of use while also adding a point of diversion. Ecology modified the Board's Record of Decision; Barker Ranch appealed the modification. A negotiated resolution between Ecology and Barker Ranch produced an Agreed Stipulated Order that authorizes a maximum 28,302 AFY with a maximum diversion rate of 69.75 CFS for the purposes of year-round irrigation of 1,893 acres for wetland and wildlife habitat (inclusive of conveyance loss and operational spill) and stock watering. The portion of the subject court claim currently proposed to be placed into the TWRP is 6,435.5 AFY with a monthly maximum delivery rate of 10.5 CFS. The trust water right will augment instream flows, between River Miles 18.0 and 10.9, in its primary reach place of use about 7.1 River Miles on the very lower stretch of the Yakima River.

The Barker Ranch water conservation project has converted 3.06 miles of the previously earthen Horn Rapids Canal, a.k.a. Richland Canal (Canal), to a closed piping system, consisting of 60- and 54-inch HDPE pipe (High-Density Polyethylene). The conversion has reduced conveyance losses in the 3.06-mile project stretch of the Canal, producing net water savings of 6,436 AFY that was previously lost to seepage.

The transfer of 6,435.5 AFY to the TWRP will leave 21,866 AFY remaining with the applicant for operation of Barker Ranch. They will continue to utilize their retained portion of their irrigation water right for the ongoing creation and maintenance of the wetlands and wildlife habitat and for stock-watering needs on Barker Ranch.

The subject application qualifies for priority processing under WAC 173-152-050(2)(c)(ii), whereby an application for change or transfer of water into the state trust water right program in accordance with Chapters 90.38 or 90.42 RCW may be processed prior to competing applications, if that transfer provides a substantial environmental benefit.

The environmental benefit from this project comes from the reduced diversion into the Horn Rapids Canal from the Yakima River thereby increasing the instream flow below the diversion point. This provides higher instream flows and better fish passage and habitat during periods when salmon are migrating through or residing in this reach of the river. It also adds and enhances current habitat for fish and wildlife to live and feed and supports a more survivable ecological balance. During low flow periods during summer months, the lower Yakima River's water temperature can be relatively warm and the instream flow water is derived mostly from return flow water arriving from irrigated lands upstream of Wanawish Dam. Augmenting instream flows below Wanawish Dam at this time of year may help provide some cooler, deep-water refuge habitat for fish and may reduce the solar heating of the lower Yakima River.

The Barker Ranch received letters of support for their grant application from the following:

- Yakima Basin Water Resource Agency
- Yakima Basin Fish & Wildlife Recovery Board
- Benton Conservation District
- Benton Conservation Association

- USDA Natural Resources Conservation Service
- Richland Rod & Gun Club
- Ducks Unlimited
- Dale Schielke, private citizen.

# **Attributes of the Water Right and Proposed Change**

# Table 1 Summary of Existing Attributes and Proposed Changes to Court Claim No. <u>CS4-1858&1859CTCL(B)</u>

Attributes	Documented	Proposed
Name	The Barker Ranch, Ltd.	State of Washington, Dept. of Ecology, Trust Water Rights Program
Priority Date   Date of Application	October 23, 1889	May 20, 2010
Maximum Instantaneous Rate (Qi)	69.75 CFS	10.50 CFS
Maximum Annual Quantity (Qa)	28,302 AFY	6,435.5 AFY
Source	Yakima River	No change
Point of Diversion (POD)	On the Yakima River, at the Wanawish Dam, on the northeasterly (left) bank, at approximately River Mile 18.0 being 2,067 feet north and 2,305 feet west from the SE corner of Section 3, T. 10 N., R. 27 E.W.M.	No change
Purpose of Use	Irrigation and creation and maintenance of wetlands and wildlife habitat of 1,893 acres, conveyance loss, operational spill and stockwater.	Instream flow
Period of Use	January 1 to December 31	No change
Place of Use (POU)	Section 13, T. 10 N., R. 27 E. W. M. lying southwest of the Horn Rapids Canal; Sections 23, 24, & 25, T. 10 N., R. 27 E. W. M. lying north and east of the Yakima River; Section 19, T. 10 N., R. 28 E. W. M. lying southwest of the Horn Rapids Canal, EXCEPT that portion lying east of the Grosscup Rd.; W1/2 NW/1/4, Section 29, T. 10 N., R. 28 E.W.M. lying west of the Horn Rapids Canal, EXCEPT short plats 628, 693, 694, and 746; Section 30, T. 10 N., R. 28 E.W.M. lying north of the Yakima River, EXCEPT that portion lying east of Grosscup Rd. and north of Weidle Rd.; Section 31, T. 10 N., R. 28 E.W.M. lying north of the Yakima River.	From the documented POD on the Yakima River at River Mile 18.0, downstream approximately 7.1 River Miles to River Mile 10.9, at the point where the last of the historic return flows reentered the Yakima River.

#### **STATEMENT OF AUTHORITIES**

State law provides that a water right may be changed if the change can be made without detriment or injury to existing water rights, and to the extent that the right is valid and has been beneficially used.

Chapter 90.38 RCW governs trust water rights in the Yakima River Basin and is the primary statute authorizing the creation and management of a trust water right. RCW 90.38.040(5)(a) provides that "No exercise of a trust water right may be authorized unless the department first determines that no existing water rights, junior or senior in priority, will be impaired as to their exercise or injured in any manner whatever by such authorization."

Pursuant to RCW 90.38.040(2), the proposed trust water right shall enjoy equal priority with its parent water right, which is October 23, 1889. The proposed change in purpose and place of use is authorized under RCW 90.38.030(1).

Funding for the applicant's water conservation project is authorized under RCW 90.90.010(4), which provides that "new water savings achieved through conservation measures funded by the (Columbia river basin water supply development) account shall be placed in trust in proportion to the state funding provided to implement a project." For the subject application, Ecology provided 100-percent project funding to the applicant, meaning 100-percent of the net water saved shall be placed in the Trust Water Rights Program.

Ecology's Guidance 1220, Guidance for Processing and Managing Trust Water Rights, and Guidance 1210, Determining Irrigation Efficiency and Consumptive Use, were followed to evaluate and quantify the proposed trust water right.

#### LEGAL REQUIREMENTS FOR PROPOSED CHANGE

The following lists requirements that must be met prior to authorizing the proposed change in CS4-1858&1859CTCL(B).

#### **Public Notice**

• A public notice for the subject trust water right was published on September 21 and 28, 2010 in the Tri-City Herald, a newspaper of general circulation located in Pasco, WA.

#### State Environmental Policy Act (SEPA)

• The Department issued a Determination of Non-Significance ("DNS") on April 9, 2009 under Washington SEPA Rules, Chapter 197-11 WAC. The DNS was published April 11, 2009 in the Tri-City Herald.

#### State of Washington Archeological and Cultural Resources Executive Order

 Pursuant to requirements under Washington State Executive Order 05-05, cultural studies were completed on this site. All state-funded projects are required to examine project sites for possible finds of past cultural activities.

Reiss-Landreau Research of Yakima, Washington performed an archaeological survey of the proposed canal piping site. Their March 27, 2009 report, *An Archaeological Review and Inventory of The Barker Ranch Canal Project, Benton County, Washington* determined that "no adverse effect" would occur from construction activities. (RLR Report 2009-154-15, p. 2)

#### **Water Resources Statutes & Code**

- RCW 90.03.380(4) and RCW 90.38.040(6) state that certain requirements necessary to process a water right change under RCW 90.03.380 shall not apply to trust water rights acquired by the state through the funding of water conservation projects under Chapter 90.38 RCW.
- RCW 90.38.010(3) defines a trust water right as "that portion of an existing water right, constituting net water savings, that is no longer required to be diverted for beneficial use due to the installation of a water conservation project that improves an existing system" and "any other water right acquired by the department under this chapter for management in the Yakima river basin trust water rights program".
- RCW 90.38.010(4) defines a "water conservation project" as "any project funded to further the purposes of this chapter and that achieves physical or operational improvements of efficiency in existing systems for diversion, conveyance, or application of water under existing water rights." This project employs operational improvements that have improved water conveyance efficiency.
- RCW 90.38.030(1) authorizes the department to "enter into contracts with water users for the purpose of providing moneys to users to assist in the financing of water conservation projects. In exchange for the financial assistance provided, the water users shall convey the trust water rights, created because of the financial assistance, to the department of ecology".
- RCW 90.38.030(2) requires that a valid water right must exist for conveyance to the department before the department enters into any contract with a water user under this chapter. The water right embodied in the subject Court Claims is a valid, confirmed water right as adjudicated by the Yakima County Superior Court.
- RCW 90.38.040(4) directs that an annual schedule showing the amount of net water saved as a result of water conservation projects carried out in accordance with this chapter shall be developed, which shall serve as the basis for the annual distribution and management of the trust water rights.
- RCW 90.38.040(5)(b) requires that before any trust water right is exercised, the department shall publish public
  notice in a newspaper of general circulation published in the county where the diversion and use are to be
  made, once a week for two consecutive weeks.
- RCW 90.90.010(2)(a) states that expenditures from the Columbia river basin water supply development account, which has funded this project, may be used to implement conservation projects.
- RCW 90.90.010(4) states that net water savings achieved through conservation measures funded by the Columbia River basin water supply development account shall be placed in trust in proportion to the state funding provided to implement a project.
- WAC 173-152-050(2)(c)(ii) qualifies this application for priority processing, whereby an application for change or transfer of water into the state TWRP in accordance with Chapter 90.38 or 90.42 RCW may be processed prior to competing applications, if that transfer provides a substantial environmental benefit.

# INVESTIGATION

On March 31, 2008, The Barker Ranch, Ltd. submitted a *Columbia River Water Management Program Grant Application*. The applicant sought funding to upgrade a portion of its water delivery system, specifically to enclose a 3.06-mile length of the Horn Rapids Canal in 60- and 54-inch HDPE (High-Density Polyethylene) pipe. The flow capacity of the enclosed pipe is estimated at 62.0 CFS. The Canal supplies water for irrigation and the on-going creation and maintenance of wetlands and wildlife habitat and for stock watering. The conversion of the 3.06-mile portion of the open, unlined, earthen canal to a sealed pipe will result in a diversion reduction, netting an estimated 6,435.5 acre-feet of saved water each year, in perpetuity. Per statutory and Program requirements, 100 percent of the net water saved will permanently transfer to the state's TWRP.

# **HISTORY OF WATER USE**

# The geographic setting & property location

The Barker Ranch and the Horn Rapids Canal are located in the city limits of West Richland on the north side of the Yakima River at the eastern end of Rattlesnake Ridge. The Ranch is located between the Yakima River along its western boundary and the Canal along its eastern boundary, beginning at about Yakima River Mile 15.2 and ending at about River Mile 10.9.

# The basin & WRIA

This court claims' place-of-use is located in the Yakima River Basin, Water Resource Inventory Area ("WRIA") No. 37, in Yakima Adjudication Subbasin No. 30 (Hanford). The water source is the Yakima River.

#### Water right history & beneficial water use

An adjudication of all surface water rights of the Yakima River Basin commenced in 1977 in Yakima County Superior Court, in *State of Washington, Department of Ecology v. James J. Acquavella, et al.*, Cause No. 77-2-01484-5. Horn Rapids Corporation filed court claim number 1858 and Joe & Berneice Barker filed court claim number 1859. The two court claims are duplicate claims covering the same property, asserting rights to the use of waters of the Yakima River.

Court claims 1858 and 1859 were adjudicated and confirmed upon the March 12, 1992 entry of the Conditional Final Order for Subbasin No. 30 (Hanford). When the entire Yakima Basin surface water rights adjudication process is complete, the Court will direct the department to issue a certificate of adjudicated water right for every water right confirmed by the Court, including the subject water right.

The subject water right confirmed by the Court in its March 12, 1992 *Conditional Final Order*, authorized a 39.5 CFS maximum instantaneous diversion rate and an annual quantity of 13,461 AFY for irrigation of 1,923 acres; 17.3 CFS for conveyance loss and 14.3 CFS for operational spill during irrigation season; and, 0.05 CFS and 34 AFY for stock watering purposes. The confirmed season-of-use for irrigation, conveyance loss, and operational spill was March 1 to October 31, and year-round for stock water.

On April 16, 1999, Barker Ranch and the Benton County Parks & Recreation Department jointly submitted to the Benton County Water Conservancy Board (Board) an *Application for Change of Water Right* for the subject Court-confirmed water right. The changes sought to modify the authorized season, purpose and place of use while also adding a point of diversion. Ecology modified the Board's Record of Decision while also negotiating a settlement producing an Agreed Stipulated Order. The Order authorizes a maximum 28,302 AFY with a maximum diversion rate of 69.75 CFS for the purposes of irrigation of 1,893 acres for wetland and wildlife habitat (inclusive of conveyance loss and operational spill) and stock watering. The season-of-use became year-round. The portion of the water right proposed to be entered into the TWRP is 6,435.5 AFY with a monthly maximum delivery rate of 10.5 CFS. The trust water right will be used for instream flow enhancement only in the primary reach—a distance of about 7.1 River Miles on the Yakima River. There will not be any secondary reach trust water right.

A July 2003 report, *Barker Ranch Water Diversion Analysis*, prepared for Barker Ranch by consulting engineer Richard Bain, Jr., reported that the Ranch has historically supported cattle but is also managed for creation and maintenance of wetlands and wildlife and waterfowl habitat. There are extensive areas that are flooded to create wetlands and habitat for all forms of wildlife and waterfowl. Over 40 seasonally flooded cells or ponds are supplied with irrigation water applied primarily by flood irrigation from a network of farm ditches fed through laterals supplied by the Horn Rapids Canal.

#### **Proposed Use**

Instream flow to enhance fish habitat in 7.1 miles of the Yakima River.

# Other Water Rights Appurtenant to the Place of Use

None.

#### Hydrologic/Hydrogeologic Evaluation

No hydrologic or hydrogeologic evaluation was required for this application.

# **Trust Water Right Calculations**

The applicant's water resource and engineering consultant (Bain Associates) used permeability studies of soils where the 3.06-mile length of the buried canal is sited to calculate the historic conveyance water loss quantity that is eliminated via a closed pipe. Table 1 shows the monthly trust water quantity (Qa) in acre-feet (AF) and the trust water instantaneous rate (Qi) in cubic-feet-per-second (CFS) of the proposed trust water made available from the project.

**Table 1** Trust Water Right Calculations

	Trast Water right Calculations												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Qi	10.50	9.75	4.74	3.50	8.47	8.75	8.47	10.50	10.50	10.50	10.50	10.50	
Qa	645.60	541.50	291.60	208.30	520.70	520.70	520.70	645.60	624.80	645.60	624.80	645.60	6435.50

#### **Trust Water Management & Place of Use**

In the Yakima Basin, trust water rights are managed on the same schedule as the historic use. The historic use of the portion of the subject water right proposed for transfer to the TWRP is shown above in Table 1. The trust water right comes to the TWRP as a result of a publicly-funded grant, and thus the public will enjoy enhanced instream flows in the primary reach of the Yakima River below the point of diversion for this water right that mirrors the historic diversionary usage of this portion of this water right.

The place of use for this primary-reach-only trust water right will be the Yakima River commencing at the historic point of diversion (River Mile 18.0) and continuing approximately 7.1 miles downstream to a point where the last of The Barker Ranch return flows have historically reentered the River. (See Attachment 1, *Trust water right reach*, on page 1.)

#### **Trust Water Agreement & Quit Claim Deed**

A Trust Water Agreement serves to describe the intent and conditions for placement of a water right into the TWRP and how the trust water right will be managed. The intentions and conditions associated with placement of this water right into the TWRP are identified in *Construction Grant Contract No. G0900195* (Contract) between Ecology and The Barker Ranch, Ltd. The Contract became effective November 1, 2008, with an expiration date of December 31, 2010. Prior to the expiration date of the Contract, both parties agreed to an extension to June 30, 2011 to fulfill all specified deliverables.

The Contract specifies six required Tasks that Barker Ranch must fulfill, including *Task 6: Project Closeout and Trust Water Conveyance*. Under this task, Barker Ranch will convey to Ecology 100-percent of the net water savings resulting from the agency's 100-percent funding of the water conservation project, or 6,436 AFY. The applicant will convey legal title of the subject portion of the water right confirmed under Court Claims 1858 and 1859 to Ecology via a Quit Claim Deed.

Ecology's intention in providing funds for the Horn Rapids Canal Piping Project was to reduce conveyance loss via ground seepage from the Canal, reducing the quantity of water required to be diverted into the Canal, and thus leave instream that quantity of saved water for the benefit of fish habitat.

# **Impairment Considerations**

Impairment is an adverse impact on the physical availability of water for a beneficial use by other authorized users whose water rights are entitled to protection. Pursuant to RCW 90.38.040(5), the exercise of a trust water right shall not impair existing water rights whether they are junior or senior to the trust water right.

For an instream flow trust water right, impairment may (or may not) occur when Ecology fully *exercises* the trust water right. Following Ecology Guidance 1220, *Guidance for Processing and Managing Trust Water Rights*, a trust water right is *exercised* when the following first three actions occur and is certain with the fourth action:

- 1. The state acquires the water right through a donation, lease, or purchase.
- 2. The state makes public notice of the trust water right.
- 3. The historic use of the water right stops or is reduced.
- 4. The water master or stream patrol person curtails or regulates a junior diversion in favor of the senior instream flow trust water right.

Ecology will acquire the subject trust water right via a publicly-funded grant program. It provided public notice by newspaper publications in the Tri-City Herald on September 21 and 28, 2010. The historic diversionary use into the Canal will be reduced monthly by the quantities shown in Table 1 above, *Trust Water Right Calculations*. If during drought years, curtailment of junior water rights in favor of this more senior trust water right is necessary, then affected water rights will be regulated. If exercise of the subject primary-reach trust water right results in any future claim of impairment of a third-party water right, Ecology will investigate the impairment claim. If Ecology determines there is impairment, Ecology will alter the subject trust water right to eliminate the impairment.

### **Consideration of Protests and Comments**

Ecology issued a SEPA Determination of Non-Significance (DNS) on April 9, 2009 and published the DNS in the Tri-City Herald of Pasco, Washington on April 11, 2009. No protests or comments were received.

A public notice announcing the proposed creation and exercise of the subject trust water right was published in the Tri-City Herald for two consecutive weeks, on September 21 & 28, 2010. No comments or protests were received.

The Barker Ranch trust water right application was presented to the Yakima Water Transfer Working Group (WTWG) on January 10, 2011. The WTWG gave concurrence for the subject application.

#### **CONCLUSIONS**

The subject proposed transfer of a portion of the water right confirmed under court claims 1858 and 1859 to the Department's TWRP, equaling 6,435.5 AFY is proper per statutory authority and Ecology guidance on processing trust water right applications.

The statutory authority is provided under Chapter 90.38 RCW, the Yakima Basin trust water right statute, and Chapter 90.90 RCW, the funding authority for the applicant's publicly-funded water conservation project. Ecology's *Guidance 1220, Guidance for Processing and Managing Trust Water Rights*, was applied in the investigation and used in this Report.

A valid water right for transfer to the TWRP exists, as evidenced by the Yakima Superior Court confirmation of the subject Barker Ranch water right in the Yakima Adjudication proceedings and a subsequent agency-approved water right change application that produced an *Agreed Stipulated Order* between the applicant and Ecology. The Order's stated annual quantity and maximum instantaneous rate are the basis for the subject application and this report's findings. In accordance with funding parameters in the *Construction Grant Contract* between Ecology and Barker Ranch, and pursuant to Chapters 90.38 and 90.90 RCW, the parties understand and agree that upon completion of a publicly funded water conservation project, a valid water right will exist for conveyance to the state's Trust Water Rights Program.

The author has tentatively determined that the quantity of water proposed for transfer to the TWRP will be available for transfer to the TWRP. The combined annual quantities and instantaneous rates of the proposed trust water right and of that portion remaining with the applicant will not exceed the water right's authorized limits or attributes.

Although not required in a tentative determination when examining a proposed trust water right acquisition under Chapter 90.38 RCW coming via a water conservation project, the author has also tentatively determined from the investigation that the subject water right is valid with evidence showing continual beneficial use beginning in the late 1890s and continuing to the present day.

The proposed trust water right acquired from the subject publicly-funded water conservation project is not detrimental to the public interest. Impairment to existing water rights is not anticipated.

#### **RECOMMENDATIONS**

Based on the above investigation and conclusions, I recommend that the request for change to the water right confirmed under Court Claims 1858 and 1859 be approved in the amounts and within the limitations listed below and subject to the provisions listed in this Report of Examination.

#### **Trust Water Right Attributes**

Up to 10.5 CFS 6,435.5 AFY from January 1 to December 31 for instream flow purposes in the primary reach within the Yakima River, in the monthly flow rates and volumes outlined above in Table 1 of this investigation report of exam.

The primary reach begins at the historic POD on the Yakima River, located adjacent to Wanawish Dam at River Mile 18.0, and continues 7.1 miles downstream to the wasteway discharge of the Horn Rapids Canal at River Mile 10.9, whereupon it terminates where the last of The Barker Ranch return flows have historically rejoined the Yakima River.

A secondary reach of	loes not exist for the	his trust water right.		
Report authored by				
		t Water Rights Coordinator	Date	
	Office of Columbi	a River/CRO		
	Department of Ed	cology		
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# **WORKS CITED**

The following works are file documents available for review upon request to the Department.

- An Archaeological Review and Inventory of The Barker Ranch Canal Project, Benton County, Washington, Reiss-Landreau Research, March 27, 2009, RLR Report 2009-154-15.
- Barker Ranch Water Diversion Analysis, Bain, Richard C. Jr., July 2003.
- Construction Grant Contract, Department of Ecology, Office of Columbia River, Columbia River Basin Water Management Program 2008 grant cycle, contract number G0900195.
- Final Programmatic Environmental Impact Statement For The Columbia River Water Management Program Under Chapter 90.90 RCW, Vol. 1, Washington State Department of Ecology, Publication No. 07-11-009, February 15, 2007.
- Processing and Managing Trust Water Rights, State of Washington, Department of Ecology, Water Resources Program Final Draft Guidance 1220, October 2010.
- Yakima River Basin Water Rights Adjudication, Report of Referee, Volume 6, Re: Subbasin No. 30 (Hanford). The State of Washington, Department of Ecology v. James J. Acquavella, et al. Yakima Superior Court Cause No. 77-2-01484-5.